UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/387,310	08/31/1999	DANIEL YELLIN	162/01150	2435

27130   7590   09/29/2003

EITAN, PEARL, LATZER & COHEN ZEDEK LLP
10 ROCKEFELLER PLAZA, SUITE 1001
NEW YORK, NY 10020

EXAMINER
WILLIAMS, DEMETRIA A

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/387,310	YELLIN ET AL.
	Examiner	Art Unit	
	Demetria A. Williams	2631	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒   Responsive to communication(s) filed on *the amendment filed July 10, 2003* .

2a)☐   This action is **FINAL**.   2b)☒ This action is non-final.

3)☐   Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒   Claim(s) *4,6,7,10-21,23-25,27-31 and 33-51* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐   Claim(s) _____ is/are allowed.

6)☒   Claim(s) *4,6,7,10-21,23-25,27-31,34,37,39-43,46 and 49-51* is/are rejected.

7)☒   Claim(s) *33,35,36,38,44,45,47, and 48* is/are objected to.

8)☐   Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐   The specification is objected to by the Examiner.

10)☐   The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐   The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12)☐   The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐   Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14)☐   Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15)☐   Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .	
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐ Notice of Informal Patent Application (PTO-152)	
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6) ☐ Other: .	

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 4, 6, 7, 10-16, 21, 23-25, and 27are rejected under 35 U.S.C. 102(e) as being anticipated by Banister et al.

2.   Regarding claim 4, Banister discloses a method comprising receiving an encoded message, decoding the message based on fewer symbols than the number in the encoded message, and moving the terminal to sleep mode based on the decoded message. See generally column 7, lines 29-40 and column 9, lines 7-41.

3.   Regarding claim 6, Banister further discloses that the content of the decoded message may be a message indicating that the terminal should move to a sleep condition (see generally column 9, lines 33-40).

4.   Regarding claim 7, Bannister further disclosed receiving the signals over a paging channel (see generally column 8, lines 16-19).

5.   Regarding claim 10, Bannister discloses that the decoding is completed before receiving all the symbols in the frame (see generally column 9, lines 13-16).

6.   Regarding claim 11, Bannister further discloses using a predetermined number of symbols for decoding by receiving data only for a specified amount of time (see generally column 8, line 66 – column 9, line 6).

7.   Regarding claims 12, 14 and 15, Bannister further discloses that the decoding is

performed by adaptively changing the number of received signals depending upon the success of

the previous decoding (see generally column 9, lines 17-29).

8.   Regarding claim 13, Bannister further discloses using a number of received signals

responsive to the quality of the channel in which the message is received (see generally column

9, lines 1-6).

9.   Regarding claim 16, Banister discloses using the least amount if symbols that would

ensure a successful decoding of the encoding message (see generally column 9, lines 7 – 67).

10.   Regarding claim 21 and 24, Bannister further discloses receiving messages, such as the

release message, during idle mode (see generally column 7, lines 32-40).

11.   Regarding claim 23, Bannister discloses a method comprising receiving a data frame of

an encoded messages, determining a number of received symbols to use in decoding the frame

based on system parameters such as the quality of the transmission channel, and decoding the

frame using the determined number of symbols (see generally column 8, line 66 – column 9, line

16).

12.   Regarding claim 25, Bannister further discloses choosing the number of symbols to use in

decoding based on the success of the previous decoding (see generally column 9, lines 17-29).

13.   Regarding claim 27, Bannister further discloses determining fewer symbols than the total

number in the frame (see generally column 9, lines 1-12).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.　　Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banister in view of Lundby.

16.　　Regarding claim 17, Banister discloses all of the elements as described above, but does not disclosed continuing to receive symbols while decoding the message. Lundby discloses a method for early decoding where the de-interleaver continues to receive symbols while the decoding process is being done (see generally column 3, lines 55-62; column 4, lines 15-21). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Banister to continue receiving symbols while decoding so that additional data will be available if there is an error in the received symbols.

17.　　Regarding claims 18-20, Banister further discloses using additional symbols than a previous decoding if the message does not pass the CRC (see generally column 9, lines 17-29).

18.　　Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banister.

19.　　Regarding claim 28, Banister discloses a receiver comprising a demodulator, a decoder to decode the data based on some of the received symbols, and means for controlling the number of received symbols used to decode the frame, which is less than the number of symbols in the frame (see generally column 8, line 22 – column 9, line 16). Banister further discloses that the number of symbols used in the decoding is based on the quality of the transmission channel (see generally column 9, lines 1-5). While Banister does not specifically disclose that determining the quality is performed in the demodulator, it would have been obvious to one or ordinary skill

in the art at the time of the invention to use the demodulator to determine the quality of the signal because the demodulator will receive the signal first.

20.   Regarding claim 29, Banister further discloses padding the frame with zeros in order to have a complete frame (see generally column 9, lines 7-12).

21.   Claims 30, 31, 34, 37, 39, 40-44, 46, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banister in view of Watanabe.

22.   Regarding claims 30, 31, and 39, Banister discloses a method of comprising receiving encoded symbols and decoding the frame based on fewer than the number of symbols in the frame (see generally column 7, lines 29-40 and column 9, lines 7-41). While Banister does disclose detecting error, there is no specific mention of correcting errors. Watanabe discloses a method of providing a decoded value including altering the values of at least one of the decoded bits of the frame by performing an error correction, and providing decoded values of the bits of the frame including the altered values (column 4, lines 58-62). By performing error correction, a frame that contains an unexpected message is altered to conform to the expected value. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Banister to include altering the values of at least one of the decoded bits, as performed by Watanabe, in order to correct for errors in the decoded message so that the system can more quickly go to sleep mode.

23.   Regarding claim 34, Banister further discloses performing error detection on the received data and receiving more bits if an error is present. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform error correction on the bits, as described by Watanabe, in order to correct the errors and more quickly move to sleep mode.

24.   Regarding claim 37, it is well known in the art that error correction schemes are only able

to correct a certain number of errors present in a frame. If there are more errors present than the

number than can be corrected, obviously no more values can be altered.

25.   Regarding claims 40 and 41, Banister further discloses performing the decoding process

again if the first process was not successful due to the presence of errors (see generally column 9,

lines 17-29). If no errors are present during the second decoding attempt, then it would be

obvious to one of ordinary skill in the art that no error correction/value alteration will be

necessary.

26.   Regarding claims 42 and 44, Banister discloses a method of decoding a message

comprising receiving an encoded message, decoding the frame based on some of the received

symbols, and moving the terminal to the sleep condition if there are no errors in the decoded

frame (see generally column 7, lines 29-40 and column 9, lines 7-41). While Banister does

disclose detecting error, there is no specific mention of correcting errors. Watanabe discloses a

method of providing a decoded value including altering the values of at least one of the decoded

bits of the frame by performing an error correction, and providing decoded values of the bits of

the frame including the altered values (column 4, lines 58-62). By performing error correction, a

frame that contains an unexpected message is altered to conform to the expected value. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify the

teachings of Banister to include altering the values of at least one of the decoded bits, as

performed by Watanabe, in order to correct for errors in the decoded message so that the system

can more quickly go to sleep mode.

27.   Regarding claim 43, Banister further discloses receiving fewer than the number of symbols in the frame (see generally column 9, lines 7-14).

28.   Regarding claims 46 and 49, Banister further discloses performing error detection on the received data and receiving more bits if an error is present. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform error correction on the bits, as described by Watanabe, in order to correct the errors and more quickly move to sleep mode.

29.   Regarding claim 47, it is well known in the art that error correction schemes are only able to correct a certain number of errors present in a frame. If there are more errors present than the number than can be corrected, obviously no more values can be altered.

30.   Regarding claims 50 and 51, Banister further discloses performing the decoding process again if the first process was not successful due to the presence of errors (see generally column 9, lines 17-29). If no errors are present during the second decoding attempt, then it would be obvious to one of ordinary skill in the art that no error correction/value alteration will be necessary.

Allowable Subject Matter

31.   Claims 45, 48, 33, 35, 36, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not disclose the qualifications for altering the values as claimed in these claims.

Response to Arguments

32.   Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetria A. Williams whose telephone number is (703) 305-4078. The examiner can normally be reached on Monday - Friday, 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

daw

MOHAMMAD H. GHAYOUR
PRIMARY EXAMINER